

Remarks and argument

Claims 1-5, 7, 11-12, 16-35, 37-39, 41-43, 45-46, and 55-63 are pending in this application. Claims 1, 55 and 61 are independent.

The Examiner notes that the addition of the amount of tartar control agent from about 1% to about 4% in claim 1 requires further search and consideration. Applicant respectfully requests that response to final office action be entered as a preliminary amendment, along with the remarks herein.

In response to the Examiner's contention that Applicant attempts to show nonobviousness by attacking references individually where the rejections are based on combinations of references, Applicant respectfully submits that Applicant's argument was directed to the combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In the previous office action, the Examiner admitted that Showa Denko did not teach the desensitizing agents of claims 40-44, did not teach the non water-soluble solid and liquid and it did not teach the pyrophosphate, tripolyphosphate or polyphosphate tartar control agent. The Examiner then cited Pera (4,775,525) to teach strontium as a desensitizing agent for the teeth (column 5, lines 27-43). In addition, the Examiner also cited Elliott et al. to teach that Soluble inorganic pyrophosphate salts have over the last few years set the commercial standard as tartar control agents (column 1, lines 26-31) and that tartar control agents such as disodium pyrophosphate, dipotassium pyrophosphate, tetrapotassium pyrophosphate, tetrasodium pyrophosphate could be added to a dentifrice composition (column 5, lines 5-16).

Applicant's response addressed the combination of teaching of all these references, even though there was no motivation to combine, since Pera U.S.

Patent No. 4,775,525 essentially teaches the use of sodium alginate as a plaque removal agent in an ingestible toothpaste and teach away from the use of normal tartar control agents and abrasives, as “(i)identifying the different kinds of offending dentifrices is difficult because the interaction of inert ingredients in each formula (which changes over time) may enhance or retard the effect of the abrasive within the mixture. In general, powders are more abrasive than pastes, and products that claim to be tooth whiteners often are harsher than others. Specific abrasive ingredients which may harm dentin include calcium carbonate, anhydrous dibasic calcium phosphate and silica” (See Col. 1, line 57 to Col. 2, line 3. (Emphasis added)); and Elliott et al. U.S. Patent No. 5,011,682 discloses yet another anti-tartar agent having “a random polymeric residue comprising at least one unit of structure II”(See Col. 2, lines 22-45) with amounts of the abrasive to “range from about 5% to about 80% by weight” See Co. 4, line 65 to Col. 5, line 4 (Emphasis added)), which is again teaching away from the present invention. The only way that one of ordinary skill in the art could have combined the references in the manner the Examiner indicated was to use Applicant’s invention as a template, to go against the direction of the teaching of the combination of references, to finally arrive at the present invention. This is impermissible hind sight reconstruction.

The Examiner admits in this office action that the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art (See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)); and that “it must be recognized

that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971)." Applicant respectfully submits that since the combined references teaches away from the present invention, as noted above, there is no motivation for arriving at the present invention but for knowledge gleaned only from the applicant's disclosure. That is improper reconstruction.

Regarding the pH of between 5.5 and 10, the examiners position is not tenable. The compositions listed on page 3 of the provisional cover a large range of compositions. A pH value is inherent in each composition. Applicant respectfully submits that that pH range of the list of compositions is in the range of about 5.5 to about 10. The Examiner can easily calculate to verify the 2 extreme values of the range by using the known values of the ingredients in the composition.

Reconsideration is respectfully requested.

CONCLUSION

In view of the remarks provided above, it is believed that all pending claims are in condition for allowance.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact the undersigned at 310-845-8501.

Dated: October 24, 2007

Respectfully submitted,

/Nancy N. Quan/

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